

What is claimed is:

1. A valve positioning system, comprising:  
  
a positioner housing;  
  
a non-contact position receiver located at least partially internal to the housing; and  
  
a non-contact position transmitter mounted to a valve actuator stem for signaling the position of the actuator to the receiver, the actuator stem being coupled externally to the positioner housing and operable for moving a valve between a first position and a second position.
2. The valve positioning system of claim 1, further includes a slide assembly for slidingly attaching the actuator stem to the positioner housing.
3. The valve positioning system of claim 2, wherein the slide assembly further includes an attaching member to connect the actuator stem to the slide assembly.
4. The valve positioning system of claim 1, wherein the transmitter is connected to the slide assembly.
5. The valve positioning system of claim 4, wherein the positioner housing further includes a groove for the transmitter to reciprocatingly slide therein.
6. The valve positioning system of claim 1, wherein the receiver is adapted to monitor the signal generated by the transmitter to determine the relative position of the actuator stem.
7. The valve positioning system of claim 1, wherein the receiver includes a Hall effect sensor.
8. The valve positioning system of claim 1, wherein the transmitter includes a magnet array.
9. The valve positioning system of claim 1, wherein the system includes a giant magnetoresistive device.

10. The valve positioning system of claim 1, wherein the system includes a potentiometer.

11. The valve positioning system of claim 1, wherein the transmitter includes a magnet holder.

12. The valve positioning system of claim 11, wherein the magnet holder includes a plurality of magnets.

13. A valve positioning system, comprising:

a positioner housing having a groove formed in a side thereof;

an actuator stem slidably connected to the positioner housing;

a position receiver located internal to the housing and adapted to determine the relative position of the actuator stem with respect to the housing; and

a position transmitter coupled to the actuator stem and located at least partially external to the housing, the transmitter operable for sliding in the groove to signal a position to the receiver.

14. The valve positioning system of claim 13, further including a sliding assembly coupled between the housing and the actuator stem.

15. The valve positioning system of claim 14, wherein the sliding assembly further includes first and second elements for clamping around the actuator stem.

16. The valve positioning system of claim 13, wherein the receiver is a non-contact sensor.

17. The valve positioning system of claim 16, wherein the non-contact sensor is a Hall effect sensor.

18. The valve positioning system of claim 13, wherein the transmitter includes a magnet array.

19. The valve positioning system of claim 13, wherein the transmitter includes a giant magnetoresistive element.

20. The valve positioning system of claim 13, wherein the transmitter includes a potentiometer.

21. The valve positioning system of claim 13, wherein the transmitter includes a magnet holder.

22. The valve positioning system of claim 21, wherein the magnet holder includes a plurality of magnets.

23. A method for determining a position of an actuation device, comprising the steps of:

coupling a non-contact transmitter to the actuation device;

providing a non-contact receiver in a protective housing;

transmitting a position signal from the transmitter;

receiving the signal with the receiver;

sending the position signal to a controller;

determining the position of the device relative to a commanded position of the controller; and

moving the actuation device to the commanded position.